

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2005

BUDGET ACTIVITY

7 - Operational system development

PE NUMBER AND TITLE

0208010A - Joint Tactical Communications Program
(TRI-TAC)

| COST (In Thousands) | FY 2004 Actual | FY 2005 Estimate | FY 2006 Estimate | FY 2007 Estimate | FY 2008 Estimate | FY 2009 Estimate | FY 2010 Estimate | FY 2011 Estimate | Cost to Complete | Total Cost |
|---|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------|
| Total Program Element (PE) Cost | 15932 | 17414 | 24906 | 5980 | 1525 | 914 | | | Continuing | 17212 |
| 01D TACTICAL INTERNET MANAGEMENT SYSTEM | 7409 | 17405 | 24906 | 5980 | 1525 | 914 | 0 | 0 | Continuing | 0 |
| 107 ISYSCON DEVELOPMENT | 8523 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17212 |

A. Mission Description and Budget Item Justification: The ISYSCON (V)4 Tactical Internet Management System (TIMS) provides network planning and management for the Lower Tactical Internet and Tactical Operations Center (TOC) Local Area Network (LAN). ISYSCON(V)4 will perform network planning, initialization, management, and monitoring of the Tactical Internet for Force XXI Brigade and Below (FBCB2), Army Battle Command System (ABCS) and TOC LANs. The ISYSCON(V)4 is the Army's communication planning and engineering system for current, future, and contingency operations. It will manage LANs, battalion through division, and perform network management functions critical for the ABCS and FBCB2 operations. It will be located at TOCs and Command Posts.

The ISYSCON Development (i.e., ISYSCON(V)1 and (V)2) automated Signal Corps units' capability to manage multiple tactical communications systems in support of battlefield operations. The Integrated System Control (ISYSCON) facility provides centralized management of the tactical communications network, establishes an interface with each technical control facility in the Army Battlefield Command System (ABCS) architecture, and enables automated configuration and management in a dynamic battlefield data network, provided by MSE and the ACUS MOD Programs. ISYSCON was developed with incremental software releases to support blocked requirements in accordance with the ORD. The ISYSCON Program serves as a baseline foundation to support future network management initiatives tied to and part of the digitized division and the Warfighter Information Network (WIN) Architecture.

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**0208010A - Joint Tactical Communications Program
(TRI-TAC)**

| <u>B. Program Change Summary</u> | FY 2005 | FY 2006 | FY 2007 |
|---|---------|---------|---------|
| Previous President's Budget (FY 2005) | 18177 | 16719 | 5877 |
| Current Budget (FY 2006/2007 PB) | 17414 | 24906 | 5980 |
| Total Adjustments | -763 | 8187 | 103 |
| Net of Program/Database Changes | | | |
| Congressional Program Reductions | -265 | | |
| Congressional Rescissions | | | |
| Congressional Increases | | | |
| Reprogrammings | | | |
| SBIR/STTR Transfer | -498 | | |
| Adjustments to Budget Years | | 8187 | 103 |

Change Summary Explanation: Funding - FY06/07 increases to fund ISYSCON(V)requirements.

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| ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit) | February 2005 |
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| BUDGET ACTIVITY 7 - Operational system development | PE NUMBER AND TITLE 0208010A - Joint Tactical Communications Program (TRI-TAC) | PROJECT 01D |
|--|--|-----------------------|

| COST (In Thousands) | FY 2004 Actual | FY 2005 Estimate | FY 2006 Estimate | FY 2007 Estimate | FY 2008 Estimate | FY 2009 Estimate | FY 2010 Estimate | FY 2011 Estimate | Cost to Complete | Total Cost |
|--|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------|------------|
| 01D TACTICAL INTERNET MANAGEMENT SYSTEM | 7409 | 17405 | 24906 | 5980 | 1525 | 914 | 0 | 0 | Continuing | 0 |

A. Mission Description and Budget Item Justification:- Army's communication planning and engineering system for current, future, and contingency operations, brigade and below

- Manage Local Area Networks (LANs) devices, battalion through theater
- Performs network device management functions critical for Army Battle Command Systems (ABCS) and Force XX1 Battle Command, Brigade and Below (FBCB2)
- Located at Tactical Operation Centers (TOCs) and Command Posts (CPs)

| <u>Accomplishments/Planned Program</u> | FY 2004 | FY 2005 | FY 2006 | FY 2007 |
|--|-------------|--------------|--------------|-------------|
| Test & Evaluation | 556 | 2200 | 0 | 1500 |
| Requirement Analysis, System Engineering, and Software Development ABCS6.4 | 6853 | 0 | 0 | 0 |
| Requirement Analysis, System Engineering, Software Development "Must Have Beyond Good Enough" Block 5 requirements | 0 | 15205 | 24906 | 4480 |
| Totals | 7409 | 17405 | 24906 | 5980 |

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PE NUMBER AND TITLE
0208010A - Joint Tactical Communications
Program (TRI-TAC)

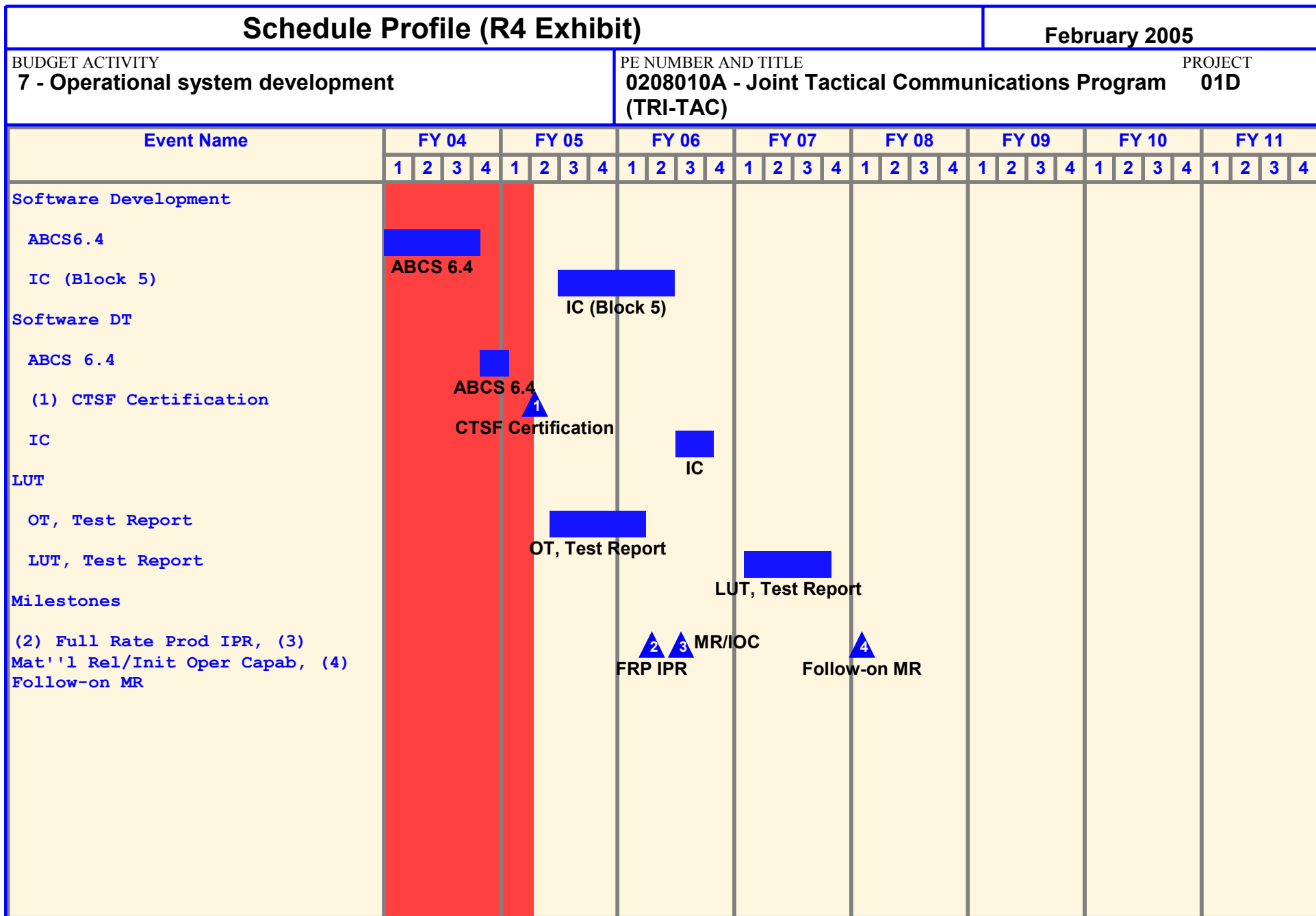
PROJECT
01D

| B. Other Program Funding Summary | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | To Compl | Total Cost |
|---|---------|---------|---------|---------|---------|---------|---------|---------|----------|------------|
| B93900 TIMS | 12967 | 11135 | 16962 | 11517 | 9346 | 3964 | 0 | 0 | 0 | 65891 |

C. Acquisition Strategy: The Tactical Internet Management System (ISYSCON (V)4/TIMS) was developed from Army Warfighter Experiments that showed tactical network management and planning to be extremely time consuming. A DD-28 change to the ISYSCON Requirement Operational Capability (ROC) identified the need for Tactical Internet and Tactical Operation Command (TI and TOC) Local Area Network management. An Operational Requirements Document (ORD), superceding the ISYSCON ROC/28 Change, was approved in May 02. Milestone C Limited Deployment was approved June 21, 2002 and amended June 17, 2002 and June 24, 2004. Blocks 2 and 4 of the ISYSCON (V)4 ORD requirements have been deployed to 4ID, 1CD and SBCTs 1, 2 & 3. The next ISYSCON (V)4 release will satisfy the Chief of Staff, Army approved ABCS 6.4 "Good Enough" requirements. The ISYSCON(V)4 IOTE will be conducted during 2-3QFY05. Full Rate Production IPR and Material Release will follow in 2nd and 3rd Qtr FY06. Beginning in FY05, the Block 5 Initialization Capability (IC) Key Performance Parameters will be developed as part of the CSA approved ABCS 6.4 "Beyond Good Enough" initiative. The IC Software Development Test is scheduled for 3rd and 4th quarter FY-06. LUT is scheduled to begin in 1Qtr FY07.

| ARMY RDT&E COST ANALYSIS(R3) | | | | | | | | | | February 2005 | | |
|---|------------------------|--------------------------------|----------------|--------------|---|--------------|--------------------|--------------|--------------------|------------------|------------|--------------------------|
| BUDGET ACTIVITY 7 - Operational system development | | | | | PE NUMBER AND TITLE 0208010A - Joint Tactical Communications Program (TRI-TAC) | | | | | PROJECT 01D | | |
| I. Product Development | Contract Method & Type | Performing Activity & Location | Total PYs Cost | FY 2005 Cost | FY 2005 Award Date | FY 2006 Cost | FY 2006 Award Date | FY 2007 Cost | FY 2007 Award Date | Cost To Complete | Total Cost | Target Value of Contract |
| a . TIMS Software Development and Upgrade | CPIF | NGMS, Carson, CA | 8457 | 12590 | 2Q | 22446 | 2Q | 3205 | 2Q | Continue | Continue | 0 |
| Subtotal: | | | 8457 | 12590 | | 22446 | | 3205 | | Continue | Continue | 0 |
| | | | | | | | | | | | | |
| II. Support Cost | Contract Method & Type | Performing Activity & Location | Total PYs Cost | FY 2005 Cost | FY 2005 Award Date | FY 2006 Cost | FY 2006 Award Date | FY 2007 Cost | FY 2007 Award Date | Cost To Complete | Total Cost | Target Value of Contract |
| a . TIMS Contractor Engr | MIPR/PWD | Various | 464 | 703 | 2Q | 732 | 2Q | 350 | 2Q | Continue | Continue | 0 |
| b . TIMS Government Engr | MIPR | Various | 1027 | 587 | 2-4Q | 616 | 2-4Q | 647 | 2-4Q | Continue | Continue | 0 |
| Subtotal: | | | 1491 | 1290 | | 1348 | | 997 | | Continue | Continue | 0 |
| | | | | | | | | | | | | |

| ARMY RDT&E COST ANALYSIS(R3) | | | | | | | | | February 2005 | | | |
|---|------------------------|--------------------------------|----------------|--------------|---|--------------|--------------------|--------------|--------------------|------------------|------------|--------------------------|
| BUDGET ACTIVITY 7 - Operational system development | | | | | PE NUMBER AND TITLE 0208010A - Joint Tactical Communications Program (TRI-TAC) | | | | | PROJECT 01D | | |
| III. Test and Evaluation | Contract Method & Type | Performing Activity & Location | Total PYs Cost | FY 2005 Cost | FY 2005 Award Date | FY 2006 Cost | FY 2006 Award Date | FY 2007 Cost | FY 2007 Award Date | Cost To Complete | Total Cost | Target Value of Contract |
| a . TIMS IOT&E | MIPR | AEC-Various | 556 | 2200 | 2-3Q | 0 | | 0 | | 0 | 2756 | 0 |
| b . IC Op Eval (Block 5) | MIPR | AEC-Various | 0 | 0 | | 0 | | 1500 | 2-3Q | 0 | 1500 | 0 |
| Subtotal: | | | 556 | 2200 | | 0 | | 1500 | | 0 | 4256 | 0 |
| | | | | | | | | | | | | |
| IV. Management Services | Contract Method & Type | Performing Activity & Location | Total PYs Cost | FY 2005 Cost | FY 2005 Award Date | FY 2006 Cost | FY 2006 Award Date | FY 2007 Cost | FY 2007 Award Date | Cost To Complete | Total Cost | Target Value of Contract |
| a . MITRE | MIPR/PWD | Eatontown, NJ | 1506 | 1325 | 2Q | 1112 | 2Q | 278 | 2Q | Continue | Continue | 0 |
| Subtotal: | | | 1506 | 1325 | | 1112 | | 278 | | Continue | Continue | 0 |
| | | | | | | | | | | | | |
| Project Total Cost: | | | 12010 | 17405 | | 24906 | | 5980 | | Continue | Continue | 0 |
| | | | | | | | | | | | | |



| Schedule Detail (R4a Exhibit) | | | | | | | February 2005 | |
|---|---------|---------|---------|---|---------|---------|---------------|----------------|
| BUDGET ACTIVITY 7 - Operational system development | | | | PE NUMBER AND TITLE 0208010A - Joint Tactical Communications Program (TRI-TAC) | | | | PROJECT 01D |
| Schedule Detail | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 |
| ABCS 6.4 Development Test Completion | 4Q | | | | | | | |
| IOTE | | 3Q | | | | | | |
| Full Rate Prod IPR | | | 2Q | | | | | |
| Materiel Release/ IOC | | | 3Q | | | | | |
| IC (Block 5) Contract Award | | 2Q | | | | | | |
| IC (Block 5) Developmental Testing | | | 3Q | | | | | |
| IC (Block 5) LUT | | | | 1Q | | | | |
| Follow-on MR | | | | | 1Q | | | |

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PROJECT
107

| COST (In Thousands) | FY 2004 Actual | FY 2005 Estimate | FY 2006 Estimate | FY 2007 Estimate | FY 2008 Estimate | FY 2009 Estimate | FY 2010 Estimate | FY 2011 Estimate | Cost to Complete | Total Cost |
|-------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------|
| 107 ISYSCON DEVELOPMENT | 8523 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17212 |

A. Mission Description and Budget Item Justification:- A requirement exists to provide Signal Corps units the automated capability to manage multiple tactical communication systems in support of dynamic battlefield operations.

- The Integrated System Control (ISYSCON) facility provides automated tools for the Signal Staff to plan, install, operate and maintain communications networks.
- ISYSCON is following the Evolutionary Acquisition Strategy; software improvements/enhancements are being developed and fielded through incremental software releases.
- The ISYSCON program serves as a baseline foundation to support future network management initiatives tied to and part of the digitized division and the Warfighter Information Network (WIN) architecture.
- The ISYSCON V1/V2 program ends with FY04 funding.
- The ISYSCON (V)4 Tactical Internet Management System (TIMS) funding transitioned to a new Project, 01D, within PE 208010A in FY03.

| <u>Accomplishments/Planned Program</u> | FY 2004 | FY 2005 | FY 2006 | FY 2007 |
|--|---------|---------|---------|---------|
| Block 3 Development (P2 Increment 2.1) | 8523 | 9 | 0 | 0 |
| Totals | 8523 | 9 | 0 | 0 |

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Program (TRI-TAC)

PROJECT
107

| <u>B. Other Program Funding Summary</u> | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | To Compl | Total Cost |
|--|---------|---------|---------|---------|---------|---------|---------|---------|----------|------------|
| BX0007 ISYSCON | 21368 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21368 |
| 028010/01D Tactical Internet Management System | 7535 | 17405 | 24906 | 5980 | 1525 | 914 | 0 | 0 | 0 | 58265 |

C. Acquisition Strategy: Successful Milestone III - Feb 99 for ISYSCON (V)1 and (V)2. ISYSCON Phase 2 Increment 1 and later versions of software supports the fielding of production systems starting with echelon corps and below units. The ISYSCON ROC to ORD conversion was completed May 02 with the approval of the ISYSCON ORD. ISYSCON is following the Evolutionary Acquisition Strategy with Block upgrades for major functionality and incremental software releases for software maintenance and minor enhancements. The next Block Software Release provides Network Management for Echelons Above Corps (EAC) units. ISYSCON production systems include acquisition of Government Furnished Equipment (GFE) (Common Hardware and Software (CHS)/Standardized Integrated Command Post System (SICPS)) hardware for the integration into system assemblages and fielding.

Tactical Internet Management System (TIMS) - See 01D Exhibit R-2A in FY03 and beyond.